

AMENDMENT
U.S. Appln. No. 09/461,308

REMARKS

Claims 1-36 are all the claims pending in the application. Claims 13-24 have been withdrawn from consideration. Claims 1-12 and 25-36 stand rejected.

Claim 25 has been amended to further recited that the measuring apparatus taught therein is used to measure a value detected from a second label, and that said value is corrected for based on the value detected from a first label. The amendment to claim 25 is fully supported by the present specification, specifically pages 12-13.

Claims 26-28 have been amended to insert the term “polynucleotides” after “cDNA.” While Applicants assert that the meaning of “cDNA” would be obvious to the skilled artisan, this amendment is being made to further the prosecution of the present case.

No new matter has been added. Entry and consideration of this Amendment is respectfully requested.

I. Rejection of Claims under 35 U.S.C. §112

1) On page 2 of the Office Action, paragraph 3, the Examiner rejects claims 1-12 under 35 U.S.C. §112, first paragraph.

In response, Applicants have canceled claims 1-12 from the application. Therefore, this rejection is moot.

2) One page 4 of the Office Action, paragraph 5, the Examiner rejects claims 1 and 3 under 35 U.S.C. §112, second paragraph, as being indefinite.

In response, Applicants have canceled claims 1-12 from the application. Therefore, this rejection is moot.

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II. Rejection of Claims under 35 U.S.C. §103

1) On page 4 of the Office Action, paragraph 7, the Examiner rejects claims 1-12 under 35 U.S.C. §103(a) as being unpatentable over Smith et al., in view of Stephens et al., further in view of Guo et al. and Liang et al.

In response, Applicants have canceled claims 1-12 from the application. Therefore, this rejection is moot.

2) On page 6 of the Office Action, paragraph 8, the Examiner rejects claims 25-32 under 35 U.S.C. § 103(a) as being unpatentable over Stern et al., for the reasons set forth on pages 7-9 of the Office Action.

The Examiner states that it would have been obvious to one of ordinary skill in the art at the time of the invention to have used the apparatus of Stern et al. to detect the interaction between different fluorescence-labeled cDNAs disposed at a plurality of predetermined positions of an array and fluorescence-labeled probe.

In response, Applicants note that independent claim 25 has been amended to include the recitation that the measuring apparatus taught in claim 25 is used to measure a value detected from a second label, and that said value is corrected for based on the value detected from a first label. Applicants assert that Stern et al. do not teach the further step of correcting the measured level of signal produced by a second label with the measured level of signal produced by a first signal.

Thus, Stern et al. do not make obvious the present invention and as such, Applicants respectfully request reconsideration and withdrawal of this rejection.

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3) On page 9 of the Office Action, paragraph 9, claims 25, and 33-36, are rejected under 35 U.S.C. §103(a) as being unpatentable over Pastore et al.

The Examiner states that Pastore et al. teach the quantitative analysis of PCR using phosphorimager-based scanning of radioactive-labeled PCR products. The Examiner further states that while Pastore et al. do not disclose the detection of the interaction between different radioactive-labeled cDNAs disposed at a plurality of predetermined positions on an array and a hybridization probe, it would have been obvious to one of ordinary skill in the art to have used the phosphorimager-based scanning suggested by Pastore et al. to do so.

In response, Applicants again note that independent claim 25 has been amended to include the recitation that the measuring apparatus taught in claim 25 is used to measure a value detected from a second label, and that said value is corrected for based on the value detected from a first label. Applicants assert that Pastore et al. do not teach the further step of correcting the measured level of signal produced by a second label with the measured level of signal produced by a first signal.

Thus, Pastore et al. do not make obvious the present invention and as such, Applicants respectfully request reconsideration and withdrawal of this rejection.

III. Conclusion

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

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Applicant hereby petitions for any extension of time which may be required to maintain the pendency of this case, and any required fee, except for the Issue Fee, for such extension is to be charged to Deposit Account No. 19-4880.

Respectfully submitted,



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APPENDIX

VERSION WITH MARKINGS TO SHOW CHANGES MADE

IN THE CLAIMS:

Claims 1-24 are canceled.

The claims are amended as follows:

25. A measuring quantitative apparatus for measuring a value detected from a second label based on a value detected from a first label comprising:

a first detection means for detecting a level of a first labeling signal emitted by a first labeling substance, which labels a plurality of known different specific binding substances respectively disposed at a plurality of predetermined positions on a carrier of a test piece, for each of said plurality of predetermined positions;

a second detection means for detecting a level of a second labeling signal emitted by a second labeling substance, which differs from said first labeling substance and labels an organism-originated substance bound to said specific binding substance, for each of said plurality of predetermined positions; and

an analyzing means for measuring a quantity of said organism-originated substance bound to said specific binding substance, based on the detected level of said second first labeling signal, corrected for and the detected level of said first second labeling signal.

26. The quantitative apparatus as set forth in claim 25, wherein said specific binding substances are cDNA polynucleotides.

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27. The quantitative apparatus as set forth in claim 25, wherein said analyzing means further performs said measurement, based on a characteristic value related to cDNA polynucleotides.

28. The quantitative apparatus as set forth in claim 26, wherein said analyzing means further performs said measurement, based on a characteristic value related to cDNA polynucleotides.